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V

# EXPEDITION TO THE REVILLAGIGEDO ISLANDS, MEXICO, IN 1925

## THE BEMBICINI (Digger Wasps)

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Report on the bembicine wasps taken by Mr. H. H. Keifer while with the 1925 Expedition of the California Academy of Sciences to the Revillagigedo Islands.

1. Steniolia duplicata Provancher

Cedros Island, Lower California, June 3, 1925. One male.

2. Stictia signata Linnæus

Arroyo Hondo, Maria Madre Island, Tres Marias Islands, Mexico, May 17, four females.

3. Stictiella bifurcata, var. albicera C. L. Fox

Cedros Island, Lower California, June 3, two males and three females.

Female: In general appearance similar to the male except that the clypeus is not entirely yellow, the basal half being black divided by a narrow yellow medial streak; dorsum of tergites yellow, not soiled white.

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### 4. Bembix magdalenæ C. L. Fox, new species

A short and robust species; labrum unusually long and narrow; clypeus large; ocelli not obliterated; ultimate tergite with lateral notches, its dorsal surface strongly rugose apically; sixth sternite with a square process apically bituberculate. Length 15-17 mm.

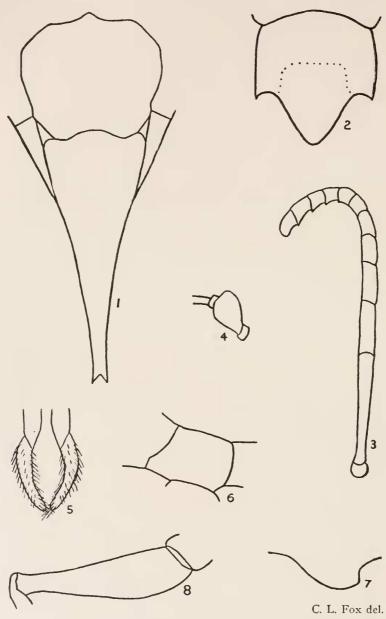
Male: Mandibles long and narrow, having an inconspicuous tooth on inner margin; labrum (fig. 1) extremely long and slender, sometimes reaching half way between anterior and intermediate coxæ; clypeus (fig. 1) three-quarters as long as wide, prominent, its anterior margin truncate at apex, behind which is a slightly flattened area; scape (fig. 4) short, strongly widened towards apex, hirsute; segment II of flagellum (fig. 3) slender, its width increasing perceptibly towards apex; segments 8-11 with inner apical angles slightly produced; 9-11 bearing elongated glabrous excavations; apical segment curved and somewhat compressed. Inner margins of compound eyes almost parallel, slightly divergent at clypeus and at vertex. Ocelli peculiar in that they are well developed, probably functional ( a character not uncommon in Mexican species of this genus); posterior pair almost round, anterior ocellus transversely oval. Anterior femora (fig. 8) much narrowed apically, becoming terete; intermediate femora unarmed below. Ultimate tergite (fig. 2) with basal half broad, abruptly notched on either side at base of the triangularly produced apical portion; basal half finely, closely punctured, these punctures becoming coarser and wider until drawn out into conspicuous longitudinal rugæ and apically into submarginal carinæ; margins at notches armed with few short bristles. Second sternite bearing a prominent median process (fig. 7), laterally compressed, rounded and very slightly hooked; sixth bearing a nearly square process occupying apical two-thirds of sternite, and elevated posteriorly into two blunt tubercles with a slight depression between them; seventh with a shallow abbreviated median groove; eighth ending in a single long, slender, decurved spine. Pubescence on head, thorax, median segment, base of abdomen, and basal joints of legs, long, dense and white, somewhat shorter on dorsum of thorax, elsewhere on abdomen very short, rather dense and semi-erect. Wings hyaline; nervures brown, costa fulvous towards base; first cubital cross vein (fig. 6) less strongly bent near its posterior end than in most species of this genus. Genital stipites (fig. 5) long, narrow, arcuately converging at apex, more or less hirsute.

Color black with the following soiled white, or yellow maculations: labrum; mandibles except apex; clypeus, except pair of small black (sometimes orange) spots on basal third below antennæ; scape below, first and second segments of flagellum below; lower part of frons; inconspicuous spot in front of anterior ocellus; broad anterior orbits reaching line of anterior ocellus; broad posterior orbits, gradually narrowing to a point at vertex; narrow irregular band on posterior margin and deflexed sides of prothorax, the latter enclosing a large black spot on and before tubercles; tegulæ almost entirely; lateral margin on scutum above the tegulæ, sometimes produced anteriorly; two small medial approximated spots on posterior border of scutum (wanting in six specimens); fascia on border of scutellum; sides of median segment almost entirely; metapleuræ; irregular broad stripe on mesopleuræ, extending from tegulæ to base of intermediate coxæ, and anterior spots, variable in size; broad continuous fasciæ on tergites 1-6, reaching the posterior margin on 5-6 and on 1-4 separated only by extremely narrow black line; fasciæ on 1-5 bi-emarginate, medially notched and sinuate laterally on anterior border, sixth almost triangular with medial notch on anterior border, apical half of seventh tergite as in fig. 2; first sternite entirely except lateral black spots; second and third with broad continuous fasciæ, undulate and narrowed more or less medially on the anterior border; fourth with large square lateral spots; apex of sixth and seventh; coxæ and trochanters in part; femora except a more or less broad black stripe above, not reaching the apex; tibiæ except inconspicuous narrow stripe below (wanting in four specimens), and tarsi entirely. Fasciæ on tergites soiled white over black, other markings more or less yellow (in places reddened by cyanide). Segments 3-12 of flagellum fusco-piceous, lighter below. Described from twelve males.

*Type:* Male, No. 1829, Mus. Calif. Acad. Sci., collected May 30, 1925, at Magdalena Bay, Lower California. *Paratypes*, same data in the collections of the Academy, U. S. National Museum, Washington, D. C., and of the author.

#### 5. Microbembex monodonta Say

Cape San Lucas, Lower California, May 28, 1925. One male.



EXPLANATION OF FIGURES Fig. 1. Clypeus and labrum.

- Fig. 5. Genital stipites.
- Fig. 2. Outline of ultimate tergite, dotted line to show base of apical maculation.
- Fig. 3. Flagellum.
- Fig. 4. Scape, viewed from below.
- vein. Fig. 7. Process on second sternite.

Fig. 6. Second cubital cell, showing

bend in first cubital cross

Fig. 8. Anterior femora.